

Please amend the claims as follows:

1. (cancel)

2. (cancel)

3. (cancel)

4. (cancel)

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6. (cancel)

7. (cancel)

8. (cancel)

9. (cancel)

10. (cancel)

11. (cancel)

12. (cancel)

13. (cancel)
14. (currently amended) A data receiving system having at least one input, the data receiving system comprising:
- a demodulator system for receiving packets in parallel over multiple channels;
- a tunneling destination, coupled to said demodulator system, said tunneling destination for receiving the packets from the demodulator system and for serializing the packets,
- an analog to digital converter having an input adapted to receive RF input signals and having an output;
- a plurality of digital filters, each of said filters having an input coupled to the output of said analog to digital converter and having an output; and
- a plurality of demodulators each of said plurality of demodulators having an input coupled to the output of a respective one of said filters and having an output and the output of each demodulator being coupled to said tunneling destination,
- further including a data transmission system comprising:
- a tunneling source having an input and a plurality of output channels, said tunneling source for receiving one or more packets at the input and for distributing the packets a plurality of output channels coupled to an output of said tunneling source;

a cable modem termination system (CMTS) coupled to receive packets from each of the plurality of tunneling source output channels and to transmit signals on a plurality of parallel output channels,

the CMTS having a CMTS router, with an input coupled to signals from said tunnel source and having a plurality of output ports;

a plurality of channel modulators, each of said plurality of channel modulators coupled to receive signals from a corresponding one of the CMTS router output ports,

a hybrid fiber coaxial (HFC) network coupled to the output of port of each of said plurality of channel modulators.

a plurality of demodulator circuits, each of the plurality of demodulator circuits having an input coupled to said HFC network and having an output;

a serializer having a plurality of input ports, each of the plurality of input ports coupled to a respective one of the output ports of said plurality of demodulator circuits and having a single output port,

~~The data transmitting system of claim 13 further comprising a TCP gateway having an input adapted to be coupled to a router and having an output coupled to an input of said tunnel source, said TCP gateway for terminating a TCP connection and for providing an acknowledgement signal a sending node.~~

15. (cancel)

16. (previously presented) The data transmitting system of claim 14, wherein the plurality of CMTS output channels are RF channels.

17. (cancel)

18. (previously presented) The data transmitting system of claim 14, wherein said CMTS further comprises:

a CMTS router, having an input coupled to signals from said tunnel source and having a plurality of output ports;

a plurality of channel modulators, each of said plurality of channel modulators having an input port coupled to receive signals from a corresponding one of the CMTS router output ports and having an output port coupled to provided one of the CMTS output channels.

19. (previously presented) The data transmitting system of claim 14, further comprising:

a plurality of channel modulators, each of said plurality of channel modulators coupled to receive signals from the output of said tunneling source;

a digital signal processor, coupled to receive signals from each of said plurality of channel modulators; and

a digital-to-analog converter having an input coupled to receive signals from said digital signal processor.

20. (cancel)